

MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (MPDES) PERMIT

FACT SHEET

Sand and Gravel General Permit (SGGP)

FACILITY: Sand and Gravel Operations
PERMIT NO.: MTG490000
LOCATION: Statewide
CONTACT: Applicant
RECEIVING WATER: Statewide

I. Status of Permit

The current general permit for Sand and Gravel (SG) operations became effective on July 1, 2007 and expired on June 30, 2012. The current permit remains in effect until a new permit is issued.

II. Description of Discharge and Discharging Facilities

Sand and gravel production is the largest non-fuel mineral industry in the United States and is closely associated with the construction industry which consumes over 90% of the SG output. Crushed stone operations are also covered under the SGGP and include the mining, quarrying and processing of crushed and broken stone and riprap. Typically, SG is removed with front-end loaders, power shovels or scrapers. Crushed stone operations use similar equipment to remove rock and stone. The process may involve removal of overburden and mine dewatering operations.

“Mine dewatering” water is any water that is impounded or that collects in the mine and is pumped, drained or removed from the mine through the efforts of the mine operator. Mine dewatering water also includes wet pit overflows caused solely by direct rainfall and ground water seepage [40 Code of Federal Regulations (CFR) 436.31 (b)]. At most SG operations, mine dewatering water contributes the largest volume of wastewater.

After the raw material is extracted, process operations include separation, screening, crushing, sizing and stockpiling of the SG. Washing aggregate produces “process wastewater”. Process wastewater is any wastewater used in the slurry transport of mined material, air emissions control or processing, exclusive of mining. Process wastewater also includes any other water that becomes commingled with such wastewater in a pit, pond, lagoon, mine or other facility used for treatment of wastewater [40 CFR 436.31(e)].

Incidental wastewater generated on-site may include non-contact water for crusher bearings and water for dust suppression.

There are approximately 15 active SG permit authorizations. All of the authorized facilities discharge intermittently. Discharges usually occur during the construction season from April to the end of November.

Pollutants in SG wastewater include total suspended solids (TSS), turbidity, oil and grease and pH. SG activities can increase the turbidity of water in excavations and pits. This water usually must be treated to meet water quality standards before it is discharged to surface water. Oil and grease may be present in SG wastewater if heavy equipment at the site is leaking fuel or hydraulic fluid. Other petroleum-based materials and lubricants stored on-site could also be spilled and enter state waters. The pH of process wastewater may be increased if there is a cement batch plant or cement-truck washing operation located on the site.

For the period from July 2007 through April 2012, seven permittees exceeded the turbidity limit a combined total of thirteen times.

III. Coverage

Submit the following to qualify for coverage to discharge under the SGGP:

1. For existing sand and gravel operations, the following must be submitted 90 days prior to the expiration date of the general permit:
 - a. Submit a complete Notice of Intent (NOI) for sand and gravel operations.
 - b. Submit the proper renewal fee as required by the Administrative Rules of Montana (ARM) 17.30.201.
2. For new sand and gravel operations, the following must be submitted 90 days prior to any discharge:
 - a. Submit a complete NOI for sand and gravel operations.
 - b. Submit the proper new permit fee as required by ARM 17.30.201.

The SGGP is applicable to SG operations and the mining or quarrying and processing of crushed and broken stone and riprap. Other mining operations, such as hard rock or talc, are not covered under the SGGP permit. These applicants must apply for an individual MPDES permit.

Section 75-5-605(2), Montana Code Annotated (MCA), of the Montana Water Quality Act (WQA) prohibits the discharge of sewage, industrial wastes or other wastes to state waters without a current permit from DEQ. Other wastes means garbage, municipal refuse, decayed wood, sawdust, shavings, bark, lime, sand, ashes, offal, night soil, oil, grease, tar, heat, chemicals, dead animals, sediment, wrecked or discarded equipment, radioactive materials, solid waste and all other substances that may pollute state waters [75-5-103(24), MCA]. Under this definition, mine dewatering water and process wastewater from SG activities are considered a waste and are subject to regulation under the Montana Pollutant Discharge Elimination System (MPDES), Title 17, Chapter 30, Subchapters 12 and 13.

Pursuant to MPDES regulation (ARM 17.30.1341), DEQ may issue general permits to cover point source discharges that meet the criteria in 40 CFR 122.28. They include operations that:

- are the same or are substantially similar,
- discharge the same types of wastes,
- require the same effluent limits or operating conditions,
- require the same or similar monitoring requirements,
- are more appropriately controlled under a general permit than under individual permits.

Permittees are responsible for notifying DEQ in writing that the source of the discharge has been eliminated and the permit should be terminated (ARM 17.30.1365). A permittee will continue to receive, and be responsible for, annual invoice statements until DEQ terminates the authorization.

This permit is applicable to the discharge of process water or wastewater from SG operations within the boundaries of the State of Montana, excluding Indian Reservations.

IV. Exclusions

The Department may deny a SGGP application for discharge under the general provisions of ARM 17.30.1341(4)(a), which include the following:

- A. The specific source applying for authorization appears unable to comply with:
 - effluent limits or other terms and conditions of the permit;
 - water quality standards established pursuant to 75-5-301, MCA;
 - discharges that the regional administrator has objected to in writing.
- B. The discharge is different in degree or nature from discharges reasonably expected from sources or activities within the category described in the SGGP.
- C. An MPDES permit or authorization for the same operation has previously been denied or revoked.
- D. The discharge to be authorized under a general MPDES permit is also included within an application or is subject to review under the Major Facility Siting Act, 75-20-101, *et seq.*, MCA.
- E. The point source will be located in an area of unique ecological or recreational significance. Such determination must be based upon considerations of Montana stream classifications adopted under 75-5-301, MCA, impacts on fishery resources, local conditions at proposed discharge sites, and designations of wilderness areas under 16 USC 1132 or of wild and scenic rivers under 16 USC 1274.
- F. Discharges under the SGGP are not allowed in A-Closed classification waters because these waters are typically used for drinking water sources. No increase

above naturally occurring turbidity, and no change in dissolved oxygen, pH and temperature are allowed in this water classification [ARM 17.30.621(3)] so it would not be cost-effective to treat wastewater from SG operations to these levels before discharging to A-Closed waters.

Under Section 75-5-401(1)(b), MCA the discharge of unaltered ground water does not require a permit if it does not contain a waste and does not cause or contribute to an exceedance of applicable water quality standards. SG water that originates from dewatering wells or from pumping ground water and does not contain other pollutants, such as petroleum hydrocarbons, domestic waste, industrial waste or other wastes and does not violate state water quality standards, including turbidity and temperature, may qualify for this exemption if the well is located outside of the permitted mine boundary.

V. Description of Receiving Waters and Effluent Characteristics

A. Description of Receiving Water and Applicable Standards

Under the WQA, state waters are defined as any body of water, irrigation system or drainage system either on the surface or underground [75-5-103(33), MCA]. The water quality standards under the WQA apply to all state waters. The definition of state waters includes ephemeral and intermittent drainages, isolated ponds, lakes and other water bodies.

Discharges from SG activities covered under this permit will be to state surface waters. Surface water quality standards in Montana Surface Water Quality Standards and Procedures (ARM 17.30 Subchapter 6) apply to SG discharges.

Treatment requirements for discharges to ephemeral streams must be no less stringent than the minimum treatment requirements set forth in ARM 17.30.635(2) and (3). Ephemeral streams are subject to ARM 17.30.635 through 17.30.637, 17.30.640, 17.30.641, 17.30.645 and 17.30.646 but not to the specific water quality standards of ARM 17.30.620 through 17.30.629.

B. Effluent Characteristics

Effluent data from discharge monitoring report (DMR) forms for all currently authorized SG operations is summarized below in Table 1.

Table 1. Sand and Gravel Data Summary for the period July 2007 through April 2012

Permit Number	Flow (gpm)		pH (s.u.) ²		Net Turbidity (NTU) ^{1,3}			
	Limit	Monthly Average			Limit	Minimum	Average	Maximum
			Low	High				
MTG490005 *	300	82	7.9	9.0	10	-43	10.3	147
MTG490006 Outfall 001	1,500	24	6.6	8.8	10	-270	-45	8.3
MTG490006 Outfall 002	1,500	359	6.1	8.5	10	-70	-14	6.1
MTG490009	117	370	8.2	8.7	5	1.5	6.1	29
MTG490011 Outfall 001	400	134	8.0	8.4	5	1.5	3.4	4.7
MTG490011 Outfall 002	400	300	8.3	8.7	5	0	0	0
MTG490014	No Discharge							
MTG490015	6,000	720	7.0	8.1	5	-40	-5.5	1.0
MTG490016	200	190	8.4	8.4	5	24	24	24
MTG490017	No Discharge							
MTG490019	23.5	13	7.4	8.4	5	-0.7	1.3	9.8
MTG490021 Outfall 001	1,500	668	7.3	8.8	10	-40	-50	-83
MTG490021 Outfall 002	1,500	432	6.7	8.6	10	3.4	6.4	9.3
MTG490022	750	578	7.8	8.6	10	0	3.3	6.4
MTG490023	No Discharge							
MTG490024	3,000	2,092	7.3	7.9	5	-41	-13	-1.9
MTG490026	None	792	7.5	8.1	5	-9	-4.3	1.5
MTG490027	No Discharge							
¹ Nephelometric Turbidity Units								
² The permit pH limit is 6 standard units (SU) as a minimum and 9 SU as a maximum.								
³ Net turbidity is the upstream turbidity value measured 100 feet upstream of the discharge influence subtracted from the turbidity of the discharge. Negative values indicate the discharge was less turbid than the receiving stream.								

VI. Proposed Effluent Limits and Conditions

A. Technology-based Effluent Limits (TBELs)

Clean Water Act (CWA) section 402(a)(1) (33 U.S.C. 1342(a)(1)) and the federal regulations at 40 CFR 125.3(a) require that permits issued under section 402, including those issued by state programs, contain TBELs that implement the technology-based treatment requirements specified in the CWA. These technology-based requirements may be national technology standards for existing sources or new sources established by the United States Environmental Protection Agency (EPA) pursuant to Section 304 of the CWA, or, in some cases, standards established by the permit writer on a case-by-case basis.

EPA promulgates effluent guidelines under the authority of Sections 301, 304, 306, 307, 308, 402, and 501 of the CWA (33 U.S.C. 1311, 1314, 1316, 1318, 1342, and 1361). The Board of Environmental Review (Board) pursuant to 75-5-304(1), MCA, has adopted effluent limitations and standards and new source performance standards in Title 17, Chapter 30, Subchapter 12 based on the applicable federal regulation. EPA has promulgated national technology-based standards of performance for both existing and new sources at 40 CFR Subchapter N for dischargers other than publicly-owned treatment works (POTWs).

Effluent guidelines establish the following standards for direct discharges from facilities other than POTWs:

- Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants discharged by an existing discharge or new discharge that is not a new source.
- Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants discharged by an existing discharge or new discharge that is not a new source.
- Best conventional pollutant control technology (BCT) represents the control of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease in an existing discharge or new discharge that is not a new source. The BCT standard is established after considering the “cost reasonableness” of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources. A source is a new source if it meets the definition of new source in ARM 17.30.1304 and 1340(1) and a new source performance standard is independently applicable to it. If there is no such independently applicable standard, the source is a new discharger [ARM 17.30.1340(2)]. A source is an existing source if it is not a new source or a new discharger. For purposes of applying effluent guidelines, the existing sources standards (BPT, BCT, and BAT) apply to existing sources and new dischargers. NSPS apply to new sources.

Pursuant to section 402(a)(2) of the federal CWA (33 U.S.C. 1342(a)(2)), where EPA has not established effluent guidelines that are applicable to a particular class or category of industrial discharger or to a specific discharge, the permit writer establishes applicable technology-based treatment requirements on a case-by-case basis using best professional judgment (BPJ). Regulations for establishing these case-by-case requirements using BPJ are given in 40 CFR 125.3 and ARM 17.30.1203.

Finally, ARM 17.30.1345(1) requires that permit limitations, standards and prohibitions must be established for each outfall or discharge point of the permitted facility, except that best management practices may be imposed under 40 CFR 122.44(k) to control or abate pollutions, including: 1) as authorized under section 304(e) of the federal CWA for the control of toxic

pollutants or hazardous wastes; 2) as authorized under section 402(p) of the federal CWA for the control of storm water dischargers; 3) when numeric effluent limitation are infeasible; and, 4) when the practices are reasonably necessary to achieve effluent limitation or standards or to carry out the purposes and intent of the CWA. Compliance with TBEL must be measured prior to dilution with the receiving water.

Under 40 CFR 436 Subpart B-Crushed Stone Subcategory and Subpart C-Construction Sand and Gravel Subcategory, these facilities are required to meet technology-based effluent limits based on BPT. Technology-based effluent limits for process wastewater and mine dewatering water for the Crushed Stone Subcategory and Construction Sand and Gravel Subcategory are shown in Table 2.

Table 2.

Effluent Characteristic	Effluent Limits	
	Maximum for any day ¹	Average of daily values for 30 consecutive days shall not exceed
pH	(1)	(1)
¹ Within the range of 6.0 to 9.0		

Any overflow from a crushed stone or construction sand and gravel facility is not subject to the limits in Table 2 if the facility is designed, constructed and maintained to contain or treat the volume of wastewater which would result from a 10-year 24-hour precipitation event. A 10-year, 24-hour event is the maximum 24-hour precipitation event with a probable reoccurrence interval of once in 10 years. This information is available in "Weather Bureau Technical Paper No. 40," May 1961 and "NOAA Atlas 2," 1973 for the 11 Western States and may be obtained from the National Climatic Center of the Environmental Data Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

Prior to December 28, 1979, technology-based effluent limits for the Crushed Stone Subcategory and Construction Sand and Gravel Subcategory included limits for TSS. However, as a result of a court case between the National Crushed Stone Association and the Environmental Protection Agency in 1979, the U.S. Court of Appeals for the Fourth Circuit invalidated effluent limits for TSS (see FR Vol. 44, No. 250, Friday, December 28, 1979).

The current SGGP includes a water quality-based effluent limit for turbidity instead of the TSS TBELs. For this permit renewal, DEQ proposes to eliminate the turbidity WQBELs (see the discussion in WQBEL section below). TSS limits will be included in this renewal as BPJ based TBELs. The *Development Document for Effluent Limit Guidelines and Standards, EPA 440/1-76/059b, July 1979* (development document) provides the rationale for the TSS limits for the Crushed Stone and Construction Sand and Gravel subcategories. Settling ponds are the most common form of treatment for discharges from SG operations, and are the basis of the TSS TBELs. Because the primary treatment utilized by the SGGP authorized permittees is settling ponds, DEQ believes the proposed TSS limits are achievable by the majority of these facilities and will provide the necessary protections for water quality. Any permittee whose facility is unable to comply with the TSS TBELs may apply for coverage under an individual MPDES permit. As part of an individual permit application, permittees may request a mixing zone to achieve any necessary WQBELs.

The proposed TSS limits are shown in Table 3.

Table 3

Effluent Characteristic	Effluent Limits	
	Maximum for any day	Average of daily values for 30 consecutive days shall not exceed
Total Suspended Solids (TSS)	45 mg/L	25 mg/L

B. Water Quality-Based Effluent Limits (WQBEL)

Section 301(b) of the CWA and 40 CFR 122.44(d), incorporated into ARM 17.30.1344(2)(b) by reference, require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. ARM 17.30.635 requires that the degree of waste treatment required to restore and maintain the quality of state water shall be based on the surface water quality standards, and: 1) the state's policy of nondegradation of existing water quality in 75-5-303, MCA; 2) present and anticipated (designated) uses of the receiving water; 3) the quality and nature of flow of the receiving water; 4) the quantity and quality of sewage, industrial or other wastes to be treated; and, 5) the presence or absence of other sources of pollution in the watershed.

The Montana Water Quality Act at 75-5-401(2), MCA states that a permit may only be issued if the Department finds that the issuance or continuance of the permit will not result in pollution of any state waters. Montana water quality standards at ARM 17.30.637(2) require that no wastes may be discharged such that the waste either alone or in combination with other wastes will violate or can reasonably be expected to violate any standard. ARM 17.30.1344(1) adopts by reference 40 CFR 122.44 which states that MPDES permits shall include limits on all pollutants which will cause, or have a reasonable potential to cause an excursion of any water quality standard, including narrative standards.

The WQA, Title 75, Part 3 requires the Board of Environmental Review (Board) to establish the classification of all state waters in accordance with their present and future most beneficial uses; to formulate and adopt standards of water quality, giving consideration to the economics of waste treatment and prevention; adopt rules implementing the state's nondegradation policy; and adopt rules governing mixing zones. The Montana Surface Water Quality Standards and Procedures are found in ARM 17.30.601-670, which also includes, by reference, Circular DEQ-7—Montana Numeric Water Quality Standards. Montana's regulations on Non-Degradation of Water Quality are in ARM 17.30.701-718 and regulations on Mixing Zones in Surface and Ground Water are in ARM 17.30.501-518.

ARM 17.30.603 states that the standards in this subchapter are adopted to establish the maximum allowable change in surface water quality and to establish a basis for limiting the discharge of pollutants. ARM 17.30.620 states that the specific water quality standards along with the general

provisions of ARM 17.30.635 through 637, 17.30.645, and 17.30.646 protect the beneficial uses set in the water-use classifications.

Applicable Water Quality Standards

WQBEL are evaluated for all parameters of concern based on the water quality standards that are applicable to the receiving water at the point of discharge. The water use classification and water quality standards that apply to the receiving water body for each regulated outfall are summarized below.

The current SGGP includes WQBEL for oil and grease, pH and turbidity. The permit also includes the following narrative prohibitions:

- There shall be no acute or chronic toxicity in the discharge.
- There shall be no discharge of sanitary wastewater.
- No added chemicals are allowed in the discharge.

Each of these limits are discussed further below.

Oil and grease – ARM 17.30.637(1)(b) requires that state waters be free from substances attributable to discharges that will create a visible oil film or result in oil and grease concentrations at or in excess of 10 mg/L. The current permit includes a prohibition on visible oil sheen and a maximum daily limit of 10 mg/L on oil and grease concentration. Monitoring for oil and grease is required only when an oil sheen is observed on the receiving water.

These limits and monitoring requirements will be continued in this permit renewal.

pH – Water quality standards for pH state that induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 9.0 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0.

The pH TBELs applicable to the Crushed Stone and Construction Sand and Gravel subcategories limit discharge pH levels to within the range of 6.0 to 9.0 standard pH units. Lacking information related to ambient pH in the various receiving waters and the effluent mixing characteristics with respect to pH, the pH range required in the TBELs aligns well with the applicable water quality standards and further WQBEL are not necessary. The current permit pH limits will be continued in this permit renewal.

Turbidity – The water quality standards for turbidity limit the maximum allowable increase above naturally occurring turbidity to either 5 or 10 NTU, depending on receiving water classification.

The standards above were applied to SG discharges as a WQBEL for net turbidity, where the effluent turbidity at the point of discharge must not exceed the upstream turbidity by more than the water quality standard. The general permit does not allow for a mixing zone, so the limit applies at the end of pipe. Over the period of record (POR) 7 permittees reported exceedances of the turbidity limits on their DMR forms. Recent inspections however, have shown that some

permittees are incorrectly collecting compliance samples from within the receiving water. When undiluted effluent samples are collected, as required by the permit, net turbidity values increase substantially and often exceed the effluent limit.

In MPDES individual permits WQBELs are normally developed with consideration of the dilution ratio in the receiving water. Where appropriate, mixing zones are granted. DEQ would normally consider granting a mixing zone for turbidity. However, because mixing zones are site and parameter specific, and MPDES general permits apply to multiple facilities, general permits rarely include mixing zones. The lack of a mixing zone for turbidity makes compliance with this limit in the SGGP difficult to achieve when the effluent is monitored correctly. Therefore, DEQ is proposing to remove the WQBEL for turbidity from the SGGP. BPJ TBELs for TSS will substitute for the turbidity limit and protect the beneficial uses of the receiving waters. Permittees whose discharge cannot comply with the TSS limits may apply for an individual permit with WQBELs and any applicable mixing zone.

Whole Effluent Toxicity – The current permit incorporates the general prohibition of ARM 17.30.637(1)(d) as a prohibition on acute or chronic toxicity in the effluent discharged from SG facilities. The permit does not include a monitoring requirement for this limit, and the limit was imposed without first determining that a reasonable potential to cause toxicity exists.

Because no monitoring has occurred for WET and DEQ has no reason to believe that the discharges from SG facilities, that are in compliance with the permit effluent limits, are creating concentrations of materials that are toxic or harmful to aquatic life, this limit will be removed from the renewed permit.

Other narrative conditions/prohibitions – The prohibitions against the discharge of sanitary wastes and added chemicals will be maintained in the renewed permit.

The Fact Sheet for the current permit includes the following language:

If the Department determines (based on information in the application, personal communication with the applicant or an on-site inspection) that flow to receiving streams is not adequately controlled to prevent erosion to streambeds or stream banks, it may require a flow dissipation device or riprap to be installed. The Department may require the installation of flow dissipation devices or riprap in the authorization letter if the discharge flow will exceed 75% of the total receiving stream capacity (i.e.- the discharge flow exceeds 75% of the stream bank height).

This condition will be maintained in the renewed permit.

VII. Final Effluent Limits

Final effluent limits are listed in Table 4.

Table 4. Final Effluent Limits

Parameter	Units	Average Monthly Limit ¹	Maximum Daily Limit ¹
Total Suspended Solids (TSS)	mg/L	25	45
Oil and Grease	mg/L	--	10
Oil and Grease	visual	No visible sheen	
Flow	gpm	²	²
pH	S.U.	In the range of 6.0 to 9.0	
Footnote: NA means not applicable.			
(1.) See Definition section at end of permit for explanation of terms			
(2.) Flow will be limited to the flow specified in the authorization letter.			

The Department may require the installation of flow dissipation devices or riprap in the authorization letter if the discharge flow will exceed 75% of the total receiving stream capacity (i.e.- the discharge flow exceeds 75% of the stream bank height).

The pH requirement is not applicable if the facility is designed, constructed and maintained to contain or treat the volume of wastewater that would result from a 10-year, 24-hour precipitation event.

There shall be no discharge of sanitary wastewater.

No added chemicals are allowed in the discharge.

VIII. Monitoring and Reporting Requirements

A. Effluent Monitoring

Samples and measurements must be representative of the volume and nature of the monitored discharge. Effluent monitoring requirements are in Table 5.

Table 5. Monitoring Requirements

Parameter	Unit	Monitoring Location	Frequency of Analyses	Sample Type ¹
Flow ²	gpm	Effluent	Daily	Instantaneous
Duration of discharge	days/month	Effluent	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Effluent	1/Week	Grab
pH	s.u.	Effluent	1/Week	Instantaneous
Oil and grease	Presence	Effluent	Daily	Visual ⁵
Oil and grease	mg/L	Effluent	1/Month	Grab
Footnotes: 1. See Definition section at end of permit for explanation of terms. 2. Flow may be estimated, determined by multiplying the pump capacity by the length of time the pump is operated, or by using another Department approved method. 3. If a visual examination of the discharge indicates the presence of hydrocarbons, by sheen, odor or other sign, the permittee is required to sample for Oil and Grease using EPA Method 1664A.				

B. Other Monitoring Requirements

The Department may adjust the monitoring frequency for parameters on a case-by-case basis. Changes will be specified in the authorization letter. These adjustments will not require a major modification to the permit or a new public notice.

IX. Mixing Zone

No mixing zone is defined for any discharge covered under this general permit. Effluent limits must be met at the end of the discharge pipe before the effluent enters state waters.

X. Nondegradation

Discharges from SG activities authorized under the SGGP may occur to ephemeral, intermittent and perennial waters. Ephemeral waters that flow less than 90 days per year are not considered high quality waters. Discharge to perennial waters and surface waters that flow 90 days or more per year are subject to Nondegradation rules (ARM 17.30.701 et. seq.). If the Department determines (based on information in the application, personal communication with the applicant or an on-site inspection) that flow to ephemeral streams is not adequately controlled to prevent erosion to streambeds or stream banks, it may require reduced flow, or that a flow dissipation device or riprap be installed.

Section 75-5-317(2)(u) of the WQA states that any other activity that is nonsignificant because of its low potential for harm to human health or the environment and its conformance with the guidance found in 75-5-301(5)(c), MCA are not subject to the provisions of Montana's Nondegradation Policy (75-5-303, MCA). Based on 75-5-317(1)

and 75-5-301(5)(c), MCA, the Department has determined SG discharges are nonsignificant because: 1) there is low potential for harm to human health or the environment, 2) the quantity and strength of the pollutant (TSS, oil and grease and pH) is low and controlled in the authorization letter, and 3) turbidity, oil and grease and pH generated from SG operations are generally not persistent in the environment. In addition, data shows that oil and grease has not been discharged by SG operations in the past and pH measurements have not exceeded the allowable range of 6.0 to 9.0 s.u.

XI. Total Maximum Daily Load (TMDL)

On September 21, 2000, a U.S. District Judge issued an order stating that until all necessary TMDLs under Section 303(d) of the Clean Water Act are established for a particular water quality limited segment (WQLS), the State is not to issue any new permits or increase permitted discharges under the MPDES program. The order was issued in the lawsuit *Friends of the Wild Swan v. U.S. EPA, et al.*, CV 97-35-M-DWM, District of Montana, Missoula Division. The Department believes that the issuance of new authorizations under this general permit does not conflict with this order because this is not a new permit and does not allow an increase in pollutant loads because effluent limits and conditions have been developed to ensure that certain pollutants of concern for which the receiving surface waters are listed as impaired water bodies on the State's 303(d) list and or completed TMDL WLAs ensure discharges will not cause or contribute to instream exceedances of water quality standards.

XII. Information Sources

ARM Title 17, Chapter 30, Subchapter 5 - Mixing Zones in Surface and Ground Water.

ARM Title 17, Chapter 30, Subchapter 6 - Surface Water Quality Standards.

ARM Title 17, Chapter 30, Subchapter 7 - Nondegradation of Water Quality.

ARM Title 17, Chapter 30, Subchapter 12 and 13 - Montana Pollutant Discharge Elimination System (MPDES) Standards.

DEQ. General Permit file for Sand and Gravel GDP-SG – MTG490000.

Federal Register Volume 44. Number 250. Friday, December 28, 1979. p. 76793

Montana Water Quality Act, MCA 75-5-101 et. seq.